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data from INPADOC
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=> thigh

L1 12302 THIGH

=> injection

L2 802852 INJECTION

=> l1 and l2

L3 1083 L1 AND L2

=> L1 (s) L2

L4 498 L1 (S) L2

=> immunization (L) L4

L5 7 IMMUNIZATION (L) L4

=> D L5 IBIB ABS 1-5

L5 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:621675 CAPLUS

DOCUMENT NUMBER: 138:3610

TITLE: Investigation on the effect of peptides mixture from
tumor cells inducing anti-tumor specific immune
response

AUTHOR(S): Feng, Zuohua; Huang, Bo; Zhang, Guimei; Li, Dong;
Wang, Hongtao

CORPORATE SOURCE: Department of Medical Molecular Biology, Tongji
Medical College, Huazhong University of Science and
Technology, Wuhan, 430030, Peop. Rep. China

SOURCE: Science in China, Series C: Life Sciences (2002),
45(4), 361-369

CODEN: SCCLFO; ISSN: 1006-9305

PUBLISHER: Science in China Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The peptides mixture was prepared from tumor cells by freezing-thawing cells, precipitation by heating, followed by acidification of the solution. The activation and proliferation of mouse splenocytes by HSP70-peptide complex, formed by the binding of HSP70 and peptides in vitro, were observed, so was the specific cytotoxicity of the proliferative lymphocytes to tumor cells. The phenotypes of the proliferative lymphocytes were analyzed by a flow cytometry. BALB/c mice inoculated with H22 hepatocarcinoma cells in peritoneal cavity or hind **thigh** were immunized by **injection** with HSP70-peptides complex to observe the inhibitory effect of the **immunization** on tumor and lifetime of tumor-bearing mice. On the other hand, blood samples were collected from the immunized mice to check the functions of liver and kidney. The results showed that the peptides mixture from tumor cells contained tumor-specific antigen peptides which could be presented by HSP70 to activate lymphocytes in vitro, the proliferative lymphocytes were T cells which were specifically cytotoxic to tumor cells, the in vivo growth of both ascitic and solid, carcinoma could be suppressed by **immunization** with HSP70-peptides and the lifetime of tumor-bearing mice was prolonged, the in vivo **immunization** with HSP70-H22-peptides had no impact on the function of mouse liver and kidney, suggesting that there was no occurrence of autoimmunity in vivo after **immunization**.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1968:20486 CAPLUS

DOCUMENT NUMBER: 68:20486

TITLE: Production of antibodies of high binding affinities to glucagon in rabbits

AUTHOR(S): Worobec, R.; Locke, Robert F.; Hall, A.; Ertl, R.

CORPORATE SOURCE: Hines Veterans Admin. Hosp., Hines, IL, USA

SOURCE: Biochemical and Biophysical Research Communications (1967), 29(3), 406-12

CODEN: BBRCA9; ISSN: 0006-291X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Rabbits received a total of 16 **injections** of 1 mg. glucagon each in the **thigh** muscle at a rate of 4 **injections**/week for 4 weeks followed by an i.m. **injection** of 1 mg. glucagon 56 days after the last **injection** of the series. All rabbits showed anti-glucagon antibody activity 21 days after beginning the **immunization** schedule, reaching peak activity 7 days after the last injection. The booster injection caused an anamnestic response of enhanced binding activity, reaching its peak in 14 days. Treatment with 2-mercaptoethanol completely inactivated the antibody activity detected on day 21 and partially inactivated antibody observed on days 28 and 35. Antibody activity was detectable in all rabbits at 6 months after the secondary glucagon injection. No antibodies to insulin were formed with the use of recrystd. glucagon.

L5 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1917:5591 CAPLUS

DOCUMENT NUMBER: 11:5591

ORIGINAL REFERENCE NO.: 11:1190e-i,1191a-b

TITLE: Bacillus sporogenes of war wounds

AUTHOR(S): Weinberg, M.; Seguin, P.

SOURCE: Comptes Rendus des Seances de la Societe de Biologie et de Ses Filiales (1916), 79, 1028-31

CODEN: CRSBAW; ISSN: 0037-9026

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Of the various anaerobic putrefying bacteria encountered in war wounds B. sporogenes was observed most frequently; all the races of this bacillus isolated exhibited the cultural characteristics indicated by Metchnikov. B. sporogenes was Gram-positive; it digested coagulated egg albumen (sometimes in 24 hrs.) and casein with development of a characteristic, insupportable putrid odor. Gelatin was rapidly liquefied. Subcutaneous injection of 3-5 cc. of 24-48 hrs. culture in glucose-bouillon in guinea pigs caused pronounced local lesions. Intramuscular **injection** of the same amts. into the **thigh** caused the local formation of a putrid gaseous phlegmon; the animals often recovered, but in some cases they succumbed in 24-36 hrs. with presentation of putrid lesions, edema and evolution of gas. The soluble toxin of B. sporogenes was obtained by filtering on a Chamberland filter 24-48 hrs. cultures in glucose-bouillon; intravenous injection of 3 cc. of the filtrate in guinea pigs caused death in 30-60 seconds. Smaller doses caused transitory crises of dyspnea with violent muscular contractions. Subcutaneous injection of the toxin in the abdomen caused pronounced edema with hemorrhagic spots; doses of 5 cc. caused death in several days. Identification of the various races isolated was greatly facilitated by agglutination tests; an excellent agglutinating serum (1:500 after 1 mo. of **immunization**) was readily obtained from the rabbit. None of the races was agglutinated, even at 1:10, by a septic antivibrio agglutinating serum (which agglutinated the homologous race of vibrios at 1:1000); the "antisporogenes" agglutinating serum failed to agglutinate any of the races of the septic vibrio. Antitoxic, antivibrio (septic) serum, when mixed with a pathogenic dose of B. sporogenes, failed to inhibit development of the lesions characteristic of the latter; the 2 bacteria are, therefore, quite distinct. The filtrate from cultures of B. sporogenes destroyed in vitro the toxin of B. oedematiens; when a mixture (kept 1 hr. at 37°) of 1 cc. of this filtrate and 1 or more lethal

doses of the toxin *B. oedematiens* were subcutaneously injected in guinea pigs the animals survived without showing local lesions. This action explains why certain investigators (Conradi and Bieling, etc.) have been unable to obtain the toxin of *B. oedematiens* (inasmuch as their cultures were probably contaminated with *B. sporogenes*). The same filtrate from *B. sporogenes* had no action (under similar conditions) on the toxin of *B. perfringens*. This action of the filtrate of *B. sporogenes* on certain toxins explains in part the diversity of the lesions produced when this bacillus is associated with various bacteria in gaseous gangrene.

L5 ANSWER 4 OF 7 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2003:11972 BIOSIS
DOCUMENT NUMBER: PREV200300011972
TITLE: Investigation on the effect of peptides mixture from tumor cells inducing anti-tumor specific immune response.
AUTHOR(S): Feng Zuohua [Reprint Author]; Huang Bo; Zhang Guimei; Li Dong; Wang Hongtao
CORPORATE SOURCE: Department of Medical Molecular Biology, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, 430030, China
fengzhg@public.wh.hb.cn
SOURCE: Science in China Series C Life Sciences, (August 2002) Vol. 45, No. 4, pp. 361-369. print.
ISSN: 1006-9305.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 18 Dec 2002
Last Updated on STN: 18 Dec 2002

AB The peptides mixture was prepared from tumor cells by freezing-thawing cells, precipitation by heating, followed by acidification of the solution. The activation and proliferation of mouse splenocytes by HSP70-peptide complex, formed by the binding of HSP70 and peptides in vitro, were observed, so was the specific cytotoxicity of the proliferative lymphocytes to tumor cells. The phenotypes of the proliferative lymphocytes were analyzed by a flow cytometer. BALB/c mice inoculated with H22 hepatocarcinoma cells in peritoneal cavity or hind **thigh** were immunized by **injection** with HSP70-peptides complex to observe the inhibitory effect of the **immunization** on tumor and lifetime of tumor-bearing mice. On the other hand, blood samples were collected from the immunized mice to check the functions of liver and kidney. The results showed that the peptides mixture from tumor cells contained tumor-specific antigen peptides which could be presented by HSP70 to activate lymphocytes in vitro, the proliferative lymphocytes were T cells which were specifically cytotoxic to tumor cells, the in vivo growth of both ascitic and solid carcinoma could be suppressed by **immunization** with HSP70-peptides and the lifetime of tumor-bearing mice was prolonged, the in vivo **immunization** with HSP70-H22-peptides had no impact on the function of mouse liver and kidney, suggesting that there was no occurrence of autoimmunity in vivo after **immunization**.

L5 ANSWER 5 OF 7 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2002:612530 BIOSIS
DOCUMENT NUMBER: PREV200200612530
TITLE: Safety and immunogenicity of pneumococcal conjugate vaccine in combination with diphtheria, tetanus toxoid, pertussis and Haemophilus influenzae type b conjugate vaccine.
AUTHOR(S): Obaro, Stephen K. [Reprint author]; Enwere, Godwin C.; Deloria, Maria; Jaffar, Shabbar; Goldblatt, David; Brainsby, Kate; Hallander, Hans; Mcinnes, Pamela; Greenwood, Brian M.; McAdam, Keith P. W. J.
CORPORATE SOURCE: Imperial College School of Medicine, London, UK
SOURCE: Pediatric Infectious Disease Journal, (October, 2002) Vol. 21, No. 10, pp. 940-946. print.
ISSN: 0891-3668.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 27 Nov 2002

AB Background: Pneumococcal polysaccharide/protein conjugate vaccines (PnCV) are immunogenic and effective in infancy. However, an addition to the nine currently recommended vaccine injections during the first year of life of African children may be a deterrent to participation in a PnCV program. Thus we have evaluated the safety and immunogenicity of a 9-valent PnCV (Wyeth Lederle Pediatrics and Vaccines) mixed with diphtheria, tetanus toxoid, cell pertussis and Haemophilus influenzae type b (TETRAMUNE). Methods: Healthy Gambian infants were randomized at the age of 2 months to receive three doses 1 month apart of either (1) placebo reconstituted in TETRAMUNE in the right **thigh** (control) or (2) PnCV in the left **thigh** and TETRAMUNE in the right **thigh** (separate) or (3) PnCV reconstituted in TETRAMUNE as a single **injection** in the right **thigh** (combined). The vaccines were given together with routine Expanded Program on **Immunization** vaccines. Adverse reactions were recorded after vaccination, and antibody concentrations were measured by enzyme-linked immunosorbent assays. Results: Local induration and tenderness were observed more commonly at the site of injection of TETRAMUNE than at the site of injection with PnCV after each dose of vaccination. Swelling at the site of injection was encountered more frequently at the site of administration of TETRAMUNE than at the site of administration PnCV ($P < 0.00001$ for Doses 1 and 2 and $P < 0.0009$ for Dose 3). Swelling at the site of administration of TETRAMUNE mixed with PnCV was comparable with that observed for TETRAMUNE alone. Although most mothers reported that the babies "felt hot" 24 h after each injection, febrile reactions (temperature, $gtoreq 38^{\circ}\text{C}$) were infrequent and resolved with antipyretics. Geometric mean titer for anti-polyribosylribitol phosphate antibody was 11.6 mug/ml (95% confidence limits (95% CI), 9.2, 14.6) in the control group and comparable with 13.3 mug/ml (95% CI 11.0, 16.0) in the combined group and significantly higher at 17.9 mug/ml (95% CI 14.7, 21.9; $P = 0.01$) in the separate group. Geometric mean concentrations of serotype-specific pneumococcal antibodies were higher in the combined group than the separate group for all nine serotypes. Antibody responses to diphtheria and pertussis antigens were similar in all groups. Anti-tetanus toxoid antibody concentrations were lowest in the combined group (6.66 IU/ml, 95% CI 5.77, 7.68 in the control group; 5.15 IU/ml, 95% CI 4.39, 6.03 in the combined group; $P = 0.02$). However, all vaccinees achieved protective antibody values. Conclusion: The combination of TETRAMUNE and PnCV is safe and immunogenic.

=> L3 (1) immunization
 PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
 FIELD CODE - 'AND' OPERATOR ASSUMED 'L7 (L) IMMUNIZAT'
 PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
 FIELD CODE - 'AND' OPERATOR ASSUMED 'L8 (L) IMMUNIZAT'
 L6 21 L3 (L) IMMUNIZATION

=> D L6 IBIB ABS 1-21

L6 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:609421 CAPLUS
 DOCUMENT NUMBER: 139:212752
 TITLE: Protection against collagen-induced arthritis by
 intramuscular gene therapy with an expression plasmid
 for the interleukin-1 receptor antagonist
 AUTHOR(S): Kim, J.-M.; Jeong, J.-G.; Ho, S.-H.; Hahn, W.; Park,
 E.-J.; Kim, S.; Yu, S. S.; Lee, Y.-W.; Kim, S.
 CORPORATE SOURCE: ViroMed Co. Ltd., Seoul, 151-818, S. Korea
 SOURCE: Gene Therapy (2003), 10(18), 1543-1550
 CODEN: GETHEC; ISSN: 0969-7128
 PUBLISHER: Nature Publishing Group
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The interleukin-1 receptor antagonist (IL-1Ra) is an endogenous protein that can prevent the binding of IL-1 to its cell-surface receptors. Among a number of techniques for gene transfer in vivo, the direct **injection** of naked DNA into muscle is simple, inexpensive and

safe. In this study, we evaluated the potential of i.m. gene therapy with plasmid DNA containing the cDNA for IL-1Ra in the prevention of murine collagen-induced arthritis (CIA). DBA/1 mice were immunized with bovine type II collagen. At 4 wk after the initial **immunization**, expression plasmid for IL-1Ra was injected into four selected sites in the **thigh** and calf muscles of DBA/1 mice. Control mice received the same plasmid, but lacking the IL-1Ra coding sequence. Macroscopic anal. of paws for redness, swelling and deformities showed that the onset of moderate to severe CIA in the paws of mice injected with IL-1Ra DNA was significantly prevented ($P < 0.05$). In addition, both the synovitis and the cartilage erosion in knee joints were dramatically reduced in mice treated with IL-1Ra DNA ($P < 0.05$). The expression of IL-1 β was significantly decreased in the ankle joints of mice treated with IL-1Ra ($P < 0.01$). Interestingly, the levels of IL-1Ra in sera and joints after i.m. **injection** of IL-1Ra DNA were significantly lower than when protein had been used in previous reports, suggesting that the therapeutic effect may be achieved by an alternative mechanism(s) rather than by systemic elevation of IL-1Ra. These observations provide the first evidence that direct i.m. **injection** of expression plasmid for IL-1Ra may effectively suppress the inflammatory pathol. in arthritis.

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:519404 CAPLUS

DOCUMENT NUMBER: 140:87472

TITLE: EMLA cream and oral glucose for **immunization** pain in 3-month-old infants

AUTHOR(S): Lindh, Viveca; Wiklund, Urban; Blomquist, Hans K.; Hakansson, Stellan

CORPORATE SOURCE: University Hospital, Department of Clinical Sciences, Pediatrics, Umea University, Umea, S-901 85, Swed.

SOURCE: Pain (2003), 104(1,2), 381-388
CODEN: PAINDB; ISSN: 0304-3959

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The objective of this study is to determine whether use of lidocaine-prilocaine 5% cream (EMLA) and oral glucose decreases pain associated with diphtheria-pertussis-tetanus (DPT) **immunization** in 3-mo-old infants. Design: randomized, double-blind, controlled trial in outpatient pediatric practice in northern Sweden. EMLA or placebo was applied to the infant's lateral region of the right **thigh** and covered with an occlusive dressing 1 h before the **immunization**. In addition, 1 mL of glucose (300 mg/mL) or placebo (water) was instilled on the baby's tongue within 2 min before the DPT-**injection**. Forty-five infants received EMLA and glucose and 45 infants placebo cream and water. ECG was recorded and stored in a computer and the procedure was videotaped. The parents and the nurse assessed the infants' pain on a visual analog scale (VAS) after the **immunization**. Heart rate and heart rate variability pre- and post-**injection** were calculated. From the videotapes, the modified behavioral pain scale (MBPS) was used to assess pain scores during baseline and after **immunization**. The latency of the first cry and total crying time were measured. The parents and the nurse scored the infants' pain on the VAS significantly lower in the treatment group than in the placebo group. The infants' responses to the **immunization** measured as the difference in MBPS scores pre- and post-**injection** were significantly lower in the EMLA-glucose group compared with the placebo group. More infants cried after the **immunization** in the placebo group compared with the EMLA-glucose group and the latency of the first cry after the **injection** was shorter in the placebo group. A biphasic transient heart rate response with a marked deceleration followed by a subsequent acceleration was seen more frequently in the placebo group compared to the EMLA-glucose group. EMLA and glucose alleviate **immunization** pain in 3-mo-old infants.

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2002:621675 CAPLUS
DOCUMENT NUMBER: 138:3610
TITLE: Investigation on the effect of peptides mixture from tumor cells inducing anti-tumor specific immune response
AUTHOR(S): Feng, Zuohua; Huang, Bo; Zhang, Guimei; Li, Dong; Wang, Hongtao
CORPORATE SOURCE: Department of Medical Molecular Biology, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, 430030, Peop. Rep. China
SOURCE: Science in China, Series C: Life Sciences (2002), 45(4), 361-369
CODEN: SCCLFO; ISSN: 1006-9305
PUBLISHER: Science in China Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The peptides mixture was prepared from tumor cells by freezing-thawing cells, precipitation by heating, followed by acidification of the solution. The activation and proliferation of mouse splenocytes by HSP70-peptide complex, formed by the binding of HSP70 and peptides in vitro, were observed, so was the specific cytotoxicity of the proliferative lymphocytes to tumor cells. The phenotypes of the proliferative lymphocytes were analyzed by a flow cytometry. BALB/c mice inoculated with H22 hepatocarcinoma cells in peritoneal cavity or hind **thigh** were immunized by **injection** with HSP70-peptides complex to observe the inhibitory effect of the **immunization** on tumor and lifetime of tumor-bearing mice. On the other hand, blood samples were collected from the immunized mice to check the functions of liver and kidney. The results showed that the peptides mixture from tumor cells contained tumor-specific antigen peptides which could be presented by HSP70 to activate lymphocytes in vitro, the proliferative lymphocytes were T cells which were specifically cytotoxic to tumor cells, the in vivo growth of both ascitic and solid, carcinoma could be suppressed by **immunization** with HSP70-peptides and the lifetime of tumor-bearing mice was prolonged, the in vivo **immunization** with HSP70-H22-peptides had no impact on the function of mouse liver and kidney, suggesting that there was no occurrence of autoimmunity in vivo after **immunization**.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 1998:812176 CAPLUS
DOCUMENT NUMBER: 130:181265
TITLE: Productivity and Some Properties of Immunoglobulin Specific against Streptococcus mutans Serotype c in Chicken Egg Yolk (IgY)
AUTHOR(S): Chang, Hung Min; Ou-Yang, Ray Feng; Chen, Yu Tang; Chen, Chao Cheng
CORPORATE SOURCE: Graduate Institute of Food Science and Technology, National Taiwan University, Taipei, 106, Taiwan
SOURCE: Journal of Agricultural and Food Chemistry (1999), 47(1), 61-66
CODEN: JAFCAU; ISSN: 0021-8561
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Hens were immunized on **thighs** by using whole cells of Streptococcus mutans MT8148 serotype c strain as antigen through i.m. and s.c. routes to investigate the difference of **immunization** reactions and the changes in yolk antibody activities against antigen after initial **immunization**. Several properties of crude IgY were examined to evaluate the stability during food processing. Results showed that the specificity of IgY of i.m. treated hens was nearly 10 times as high as those of s.c. treated antibody. IgY from the hens immunized with the serotype c strain showed significant cross-reactions

against serotypes e and f, while minor reactions against serotypes a, b, d, and g were observed. In thermal stability tests, IgY activity in both yolk and crude IgY decreased with the increasing temperature, from 70 to 80°, but the thermal denaturation rates between those two samples were not significantly different. The addition of high levels sucrose, maltose, glycerol, or 2% glycine displayed effective protection against thermal denaturation of IgY. Lyophilized yolk-5% gum arabic powder showed better stability against proteases.

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:554465 CAPLUS

DOCUMENT NUMBER: 129:301372

TITLE: Influence of inoculation site of combined oil-adjuvanted vaccine on the antibody response in chickens

AUTHOR(S): Deguchi, Kazuhiro; Honda, Takashi; Matsuo, Kazuo; Fujikawa, Hideo; Iwamoto, Toshinori; Sakanoue, Yoshihiro

CORPORATE SOURCE: The Chemo-Sero-Therapeutic Research Institute, Kumamoto, 860-8568, Japan

SOURCE: Journal of Veterinary Medical Science (1998), 60(7), 831-835

CODEN: JVMSEQ; ISSN: 0916-7250

PUBLISHER: Japanese Society of Veterinary Science

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Inactivated oil-adjuvanted vaccines for ND, IB, and IC serotypes A and C (OILVAX NB2AC) have been marketed since 1993. In the outdoors, various inoculation sites have been used in chickens to make the inoculation procedure easier. We examined whether differences would be obtained in the antibody response depending on the inoculation sites. OILVAX was s.c. inoculation into the back of the neck, and in the **thigh**, lower **thigh**, breast and shoulder muscle to access possible outdoor inoculation protocols. No clear correlation was found between NDV-HI titer, IBV-SN titer against Nerima or TM-86 and the inoculation sites tested during the examination period. However, the IC serotypes A and C HI titers did vary among the inoculation sites; the s.c. inoculation produced the highest antibody titer, i.m inoculations showed antibody titers in the order of lower **thigh** muscle ≥ **thigh** muscle ≥ breast muscle ≥ shoulder muscle inoculation.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1993:597256 CAPLUS

DOCUMENT NUMBER: 119:197256

TITLE: Gene transfer in birds by introduction of DNA into muscle in ovo

INVENTOR(S): Petitte, James M.; Ricks, Catherine A.

PATENT ASSIGNEE(S): North Carolina State University, USA; Embrex, Inc.

SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9314629	A1	19930805	WO 1993-US761	19930126
W: AT, AU, BG, CA, CH, DE, ES, FI, GB, HU, JP, LU, NL, NO, PL, RO, RU, SE, UA				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9335969	A1	19930901	AU 1993-35969	19930126
EP 625007	A1	19941123	EP 1993-904696	19930126

R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
JP 07504320	T2 19950518 JP 1993-513422 19930126
BR 9305795	A 19970218 BR 1993-5795 19930126
ZA 9300585	A 19930901 ZA 1993-585 19930127
ZA 9300586	A 19930901 ZA 1993-586 19930127
IL 104536	A1 19990714 IL 1993-104536 19930127
US 5784992	A 19980728 US 1995-383703 19950201
US 6395961	B1 20020528 US 1998-96945 19980612
US 2003150006	A1 20030807 US 2003-355856 20030131

PRIORITY APPLN. INFO.:

US 1992-826030	A 19920127
US 1993-999399	A 19930121
US 1993-999398	B1 19930121
WO 1993-US761	A 19930126
US 1995-383703	A1 19950201
US 1995-446021	A1 19950519

AB The phenotype of birds is altered by depositing DNA in the muscle tissue of the embryo in the egg. The DNA may be a gene for a growth factor, cytokine/lymphokine, or hormone, or for an antigenic protein. A method for injecting the DNA into the muscle tissue and an apparatus for simultaneous **injection** of multiple embryos are described. A β -galactosidase expression construct was injected into breast, pipping, or **thigh** muscle of day 18 or day 19 chick embryos. PCR anal. of DNA of muscle tissue of hatched birds indicated that the expression construct persisted after hatching.

L6 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1968:20486 CAPLUS
DOCUMENT NUMBER: 68:20486
TITLE: Production of antibodies of high binding affinities to glucagon in rabbits
AUTHOR(S): Worobec, R.; Locke, Robert F.; Hall, A.; Ertl, R.
CORPORATE SOURCE: Hines Veterans Admin. Hosp., Hines, IL, USA
SOURCE: Biochemical and Biophysical Research Communications (1967), 29(3), 406-12
CODEN: BBRCA9; ISSN: 0006-291X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Rabbits received a total of 16 **injections** of 1 mg. glucagon each in the **thigh** muscle at a rate of 4 **injections**/week for 4 weeks followed by an i.m. **injection** of 1 mg. glucagon 56 days after the last **injection** of the series. All rabbits showed anti-glucagon antibody activity 21 days after beginning the **immunization** schedule, reaching peak activity 7 days after the last **injection**. The booster **injection** caused an anamnestic response of enhanced binding activity, reaching its peak in 14 days. Treatment with 2-mercaptoethanol completely inactivated the antibody activity detected on day 21 and partially inactivated antibody observed on days 28 and 35. Antibody activity was detectable in all rabbits at 6 months after the secondary glucagon **injection**. No antibodies to insulin were formed with the use of recrystd. glucagon.

L6 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1942:27196 CAPLUS
DOCUMENT NUMBER: 36:27196
ORIGINAL REFERENCE NO.: 36:4182f-i,4183a-d
TITLE: Glomerulonephritis. I. Serological investigation of the nephrotoxic immune serum, hemolysin and precipitin (immune serum against rabbit serum)
AUTHOR(S): Izumi, F.
SOURCE: Nippon Naibunpi Gakkai Zasshi (1940), 16, 48-52
CODEN: NNGZAZ; ISSN: 0029-0661
DOCUMENT TYPE: Journal
LANGUAGE: German

AB Ducks received **injections**, in most cases intraperitoneally, of a kidney pulp prepared from rinsed, blood-free rabbit kidneys, of rabbit erythrocytes and of rabbit blood serum at intervals of 4-5 days. The rabbit erythrocytes and serum were occasionally injected intravenously. Severe shock symptoms appeared directly after the 6th **injection**

in the ducks immunized intravenously, so that not more than 13 cc. rabbit serum or not more than a 30% erythrocyte suspension could be used. The antisera, obtained from the ducks in the usual manner, were inactivated at 56° for 1/2 hr. and preserved in the refrigerator with the addition of phenol. The emulsions of the kidneys, liver, lungs and muscle (M. psoas major and **thigh** muscle) were prepared in each case from the corresponding perfused, blood-free organ with the addition of physiol. NaCl solution; the protein content was kept constant at 0.5%, estimated refractometrically. The rabbit serum was used as such. The precipitation expts. were performed by the usual method of overlaying with increasing dilution of the antigens. A 1:1 dilution of the original sera was always used as the antigen. In the hemagglutination expts. 0.5 cc. 2.5% erythrocyte suspension was added to increasing dilns. of antiserum (1.0 cc.) and kept for 2 hrs. at 37°. In the complement-binding tests 3 nephrotoxic antisera and 2 control sera were used. Goat erythrocytes and a rabbit hemolysin against goat erythrocytes served as the hemolytic system. The organ emulsions were employed as antigens, with half the antihemolytic dose. The antihemolytic properties of the antisera were also studied. Eleven normal sera from healthy ducks served as controls. The nephrotoxic immune sera always showed a relatively high precipitation titer against the kidney emulsion; i. e., the specific serological property of the nephrotoxic immune sera was always more or less demonstrable. But this specificity of the nephrotoxic immune sera was not pronounced and fell far below the specific property of these antisera in the expts. in vivo, in which they produced a marked, specific kidney damage (glomerulonephritis). Comparison of these exptl. results with those obtained with other organocytotoxic immune sera (hepatotoxic, myotoxic and pneumotoxic immune sera and antisera against the rabbit placenta) showed distinctly that the precipitation titer against kidney emulsion does not always parallel the nephrotoxic property (property of producing glomerulonephritic kidney damage in vivo). The specific precipitation titer of the nephrotoxic immune sera showed no direct connection with the number of **immunizations**; it depended upon the individual duck used. As far as the rabbit material is concerned, it must be assumed that the nephrotoxic immune serum shows a strikingly low serological affinity for blood serum and erythrocytes and, conversely, the immune serum (precipitin) against blood serum and the hemolytic serum exhibit an extremely low serological affinity for the kidneys. The duck immune sera (nephrotoxic immune sera) against rabbit kidneys did not bind the guinea-pig complement in vitro in the presence of the exts. of rabbit kidneys, liver, lungs and muscle.

L6 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1917:5591 CAPLUS

DOCUMENT NUMBER: 11:5591

ORIGINAL REFERENCE NO.: 11:1190e-i, 1191a-b

TITLE: Bacillus sporogenes of war wounds

AUTHOR(S): Weinberg, M.; Seguin, P.

SOURCE: Comptes Rendus des Seances de la Societe de Biologie et de Ses Filiales (1916), 79, 1028-31
CODEN: CRSBAW; ISSN: 0037-9026

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Of the various anaerobic putrefying bacteria encountered in war wounds B. sporogenes was observed most frequently; all the races of this bacillus isolated exhibited the cultural characteristics indicated by Metchnikov. B. sporogenes was Gram-positive; it digested coagulated egg albumen (sometimes in 24 hrs.) and casein with development of a characteristic, insupportable putrid odor. Gelatin was rapidly liquefied. Subcutaneous **injection** of 3-5 cc. of 24-48 hrs. culture in glucose-bouillon in guinea pigs caused pronounced local lesions. Intramuscular **injection** of the same amts. into the **thigh** caused the local formation of a putrid gaseous phlegmon; the animals often recovered, but in some cases they succumbed in 24-36 hrs. with presentation of putrid lesions, edema and evolution of gas. The soluble toxin of B. sporogenes was obtained by filtering on a Chamberland filter 24-48 hrs. cultures in glucose-bouillon; intravenous **injection** of 3 cc. of the filtrate in guinea pigs caused death in 30-60 seconds. Smaller doses caused

transitory crises of dyspnea with violent muscular contractions. Subcutaneous **injection** of the toxin in the abdomen caused pronounced edema with hemorrhagic spots; doses of 5 cc. caused death in several days. Identification of the various races isolated was greatly facilitated by agglutination tests; an excellent agglutinating serum (1:500 after 1 mo. of **immunization**) was readily obtained from the rabbit. None of the races was agglutinated, even at 1:10, by a septic antivibrio agglutinating serum (which agglutinated the homologous race of vibrios at 1:1000); the "antisporogenes" agglutinating serum failed to agglutinate any of the races of the septic vibrio. Antitoxic, antivibrio (septic) serum, when mixed with a pathogenic dose of B. sporogenes, failed to inhibit development of the lesions characteristic of the latter; the 2 bacteria are, therefore, quite distinct. The filtrate from cultures of B. sporogenes destroyed in vitro the toxin of B. oedematiens; when a mixture (kept 1 hr. at 37°) of 1 cc. of this filtrate and 1 or more lethal doses of the toxin B. oedematiens were subcutaneously injected in guinea pigs the animals survived without showing local lesions. This action explains why certain investigators (Conradi and Bieling, etc.) have been unable to obtain the toxin of B. oedematiens (inasmuch as their cultures were probably contaminated with B. sporogenes). The same filtrate from B. sporogenes had no action (under similar conditions) on the toxin of B. perfringens. This action of the filtrate of B. sporogenes on certain toxins explains in part the diversity of the lesions produced when this bacillus is associated with various bacteria in gaseous gangrene.

L6 ANSWER 10 OF 21 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 2003:409955 BIOSIS

DOCUMENT NUMBER: PREV200300409955

TITLE: Protection against collagen-induced arthritis by intramuscular gene therapy with an expression plasmid for the interleukin-1 receptor antagonist.

AUTHOR(S): Kim, J.-M.; Jeong, J.-G.; Ho, S.-H.; Hahn, W.; Park, E.-J.; Yu, S. S.; Lee, Y.-W.; Kim, S. [Reprint Author]

CORPORATE SOURCE: Institute of Molecular Biology and Genetics, Seoul National University, Kwan-Ak-Gu, Bldg-105, Seoul, 151-742, South Korea

SOURCE: Gene Therapy, (September 2003) Vol. 10, No. 18, pp. 1543-1550. print.

ISSN: 0969-7128 (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 10 Sep 2003

Last Updated on STN: 10 Sep 2003

AB The interleukin-1 receptor antagonist (IL-1Ra) is an endogenous protein that can prevent the binding of IL-1 to its cell-surface receptors. Among a number of techniques for gene transfer in vivo, the direct **injection** of naked DNA into muscle is simple, inexpensive and safe. In this study, we evaluated the potential of intramuscular gene therapy with plasmid DNA containing the cDNA for IL-1Ra in the prevention of murine collagen-induced arthritis (CIA). DBA/1 mice were immunized with bovine type II collagen. At 4 weeks after the initial **immunization**, expression plasmid for IL-1Ra was injected into four selected sites in the **thigh** and calf muscles of DBA/1 mice. Control mice received the same plasmid, but lacking the IL-1Ra coding sequence. Macroscopic analysis of paws for redness, swelling and deformities showed that the onset of moderate to severe CIA in the paws of mice injected with IL-1Ra DNA was significantly prevented ($P < 0.05$). In addition, both the synovitis and the cartilage erosion in knee joints were dramatically reduced in mice treated with IL-1Ra DNA ($P < 0.05$). The expression of IL-1beta was significantly decreased in the ankle joints of mice treated with IL-1Ra ($P < 0.01$). Interestingly, the levels of IL-1Ra in sera and joints after intramuscular **injection** of IL-1Ra DNA were significantly lower than when protein had been used in previous reports, suggesting that the therapeutic effect may be achieved by an alternative mechanism(s) rather than by systemic elevation of IL-1Ra. These observations provide the first evidence that direct intramuscular **injection** of expression plasmid for IL-1Ra may effectively

suppress the inflammatory pathology in arthritis.

L6 ANSWER 11 OF 21 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
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ACCESSION NUMBER: 2003:366823 BIOSIS
DOCUMENT NUMBER: PREV200300366823
TITLE: EMLA(R) cream and oral glucose for **immunization**
pain in 3-month-old infants.
AUTHOR(S): Lindh, Viveca [Reprint Author]; Wiklund, Urban; Blomquist,
Hans K.; Hakansson, Stellan
CORPORATE SOURCE: Department of Clinical Sciences, Pediatrics, University
Hospital, Umea University, S-901 85, Umea, Sweden
viveca.lindh@pediatri.umu.se
SOURCE: Pain, (July 2003) Vol. 104, No. 1-2, pp. 381-388. print.
ISSN: 0304-3959 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 13 Aug 2003
Last Updated on STN: 13 Aug 2003

AB The objective of this study is to determine whether use of
lidocaine-prilocaine 5% cream (EMLA(R)) and oral glucose decreases pain
associated with diphtheria-pertussis-tetanus (DPT) **immunization**
in 3-month-old infants. Design: randomized, double-blind, controlled
trial in outpatient paediatric practice in northern Sweden. EMLA or
placebo was applied to the infant's lateral region of the right
thigh and covered with an occlusive dressing 1 h before the
immunization. In addition, 1 ml of glucose (300 mg/ml) or placebo
(water) was instilled on the baby's tongue within 2 min before the DPT-
injection. Forty-five infants received EMLA and glucose and 45
infants placebo cream and water. ECG was recorded and stored in a
computer and the procedure was videotaped. The parents and the nurse
assessed the infants' pain on a visual analogue scale (VAS) after the
immunization. Heart rate and heart rate variability pre- and
post-**injection** were calculated. From the videotapes, the
modified behavioural pain scale (MBPS) was used to assess pain scores
during baseline and after **immunization**. The latency of the
first cry and total crying time were measured. The parents and the nurse
scored the infants' pain on the VAS significantly lower in the treatment
group than in the placebo group. The infants' responses to the
immunization measured as the difference in MBPS scores pre- and
post-**injection** were significantly lower in the EMLA-glucose
group compared with the placebo group. More infants cried after the
immunization in the placebo group compared with the EMLA-glucose
group and the latency of the first cry after the **injection** was
shorter in the placebo group. A biphasic transient heart rate response
with a marked deceleration followed by a subsequent acceleration was seen
more frequently in the placebo group compared to the EMLA-glucose group.
EMLA and glucose alleviate **immunization** pain in 3-month-old
infants.

L6 ANSWER 12 OF 21 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
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ACCESSION NUMBER: 2003:11972 BIOSIS
DOCUMENT NUMBER: PREV200300011972
TITLE: Investigation on the effect of peptides mixture from tumor
cells inducing anti-tumor specific immune response.
AUTHOR(S): Feng Zuohua [Reprint Author]; Huang Bo; Zhang Guimei; Li
Dong; Wang Hongtao
CORPORATE SOURCE: Department of Medical Molecular Biology, Tongji Medical
College, Huazhong University of Science and Technology,
Wuhan, 430030, China
fengzhg@public.wh.hb.cn
SOURCE: Science in China Series C Life Sciences, (August 2002) Vol.
45, No. 4, pp. 361-369. print.
ISSN: 1006-9305.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 18 Dec 2002

AB The peptides mixture was prepared from tumor cells by freezing-thawing cells, precipitation by heating, followed by acidification of the solution. The activation and proliferation of mouse splenocytes by HSP70-peptide complex, formed by the binding of HSP70 and peptides in vitro, were observed, so was the specific cytotoxicity of the proliferative lymphocytes to tumor cells. The phenotypes of the proliferative lymphocytes were analyzed by a flow cytometer. BALB/c mice inoculated with H22 hepatocarcinoma cells in peritoneal cavity or hind **thigh** were immunized by **injection** with HSP70-peptides complex to observe the inhibitory effect of the **immunization** on tumor and lifetime of tumor-bearing mice. On the other hand, blood samples were collected from the immunized mice to check the functions of liver and kidney. The results showed that the peptides mixture from tumor cells contained tumor-specific antigen peptides which could be presented by HSP70 to activate lymphocytes in vitro, the proliferative lymphocytes were T cells which were specifically cytotoxic to tumor cells, the in vivo growth of both ascitic and solid carcinoma could be suppressed by **immunization** with HSP70-peptides and the lifetime of tumor-bearing mice was prolonged, the in vivo **immunization** with HSP70-H22-peptides had no impact on the function of mouse liver and kidney, suggesting that there was no occurrence of autoimmunity in vivo after **immunization**.

L6 ANSWER 13 OF 21 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:612530 BIOSIS

DOCUMENT NUMBER: PREV200200612530

TITLE: Safety and immunogenicity of pneumococcal conjugate vaccine in combination with diphtheria, tetanus toxoid, pertussis and Haemophilus influenzae type b conjugate vaccine.

AUTHOR(S): Obaro, Stephen K. [Reprint author]; Enwere, Godwin C.; Deloria, Maria; Jaffar, Shabbar; Goldblatt, David; Brainsby, Kate; Hallander, Hans; Mcinnes, Pamela; Greenwood, Brian M.; McAdam, Keith P. W. J.

CORPORATE SOURCE: Imperial College School of Medicine, London, UK

SOURCE: Pediatric Infectious Disease Journal, (October, 2002) Vol. 21, No. 10, pp. 940-946. print. ISSN: 0891-3668.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 27 Nov 2002

Last Updated on STN: 27 Nov 2002

AB Background: Pneumococcal polysaccharide/protein conjugate vaccines (PnCV) are immunogenic and effective in infancy. However, an addition to the nine currently recommended vaccine **injections** during the first year of life of African children may be a deterrent to participation in a PnCV program. Thus we have evaluated the safety and immunogenicity of a 9-valent PnCV (Wyeth Lederle Pediatrics and Vaccines) mixed with diphtheria, tetanus toxoid, cell pertussis and Haemophilus influenzae type b (TETRAMUNE). Methods: Healthy Gambian infants were randomized at the age of 2 months to receive three doses 1 month apart of either (1) placebo reconstituted in TETRAMUNE in the right **thigh** (control) or (2) PnCV in the left **thigh** and TETRAMUNE in the right **thigh** (separate) or (3) PnCV reconstituted in TETRAMUNE as a single **injection** in the right **thigh** (combined). The vaccines were given together with routine Expanded Program on **Immunization** vaccines. Adverse reactions were recorded after vaccination, and antibody concentrations were measured by enzyme-linked immunosorbent assays. Results: Local induration and tenderness were observed more commonly at the site of **injection** of TETRAMUNE than at the site of **injection** with PnCV after each dose of vaccination. Swelling at the site of **injection** was encountered more frequently at the site of administration of TETRAMUNE than at the site of administration PnCV ($P < 0.00001$ for Doses 1 and 2 and $P < 0.0009$ for Dose 3). Swelling at the site of administration of TETRAMUNE mixed with PnCV was comparable with that observed for TETRAMUNE alone. Although most mothers reported that the babies "felt hot" 24 h after each **injection**, febrile

reactions (temperature, gtoreq38degreeC) were infrequent and resolved with antipyretics. Geometric mean titer for anti-polyribosylribitol phosphate antibody was 11.6 mug/ml (95% confidence limits (95% CI), 9.2, 14.6) in the control group and comparable with 13.3 mug/ml (95% CI 11.0, 16.0) in the combined group and significantly higher at 17.9 mug/ml (95% CI 14.7, 21.9; P=0.01) in the separate group. Geometric mean concentrations of serotype-specific pneumococcal antibodies were higher in the combined group than the separate group for all nine serotypes. Antibody responses to diphtheria and pertussis antigens were similar in all groups. Anti-tetanus toxoid antibody concentrations were lowest in the combined group (6.66 IU/ml, 95% CI 5.77, 7.68 in the control group; 5.15 IU/ml, 95% CI 4.39, 6.03 in the combined group; P=0.02). However, all vaccinees achieved protective antibody values. Conclusion: The combination of TETRAMUNE and PnCv is safe and immunogenic.

L6 ANSWER 14 OF 21 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 2001:387359 BIOSIS
DOCUMENT NUMBER: PREV200100387359
TITLE: Hepatitis B vaccine in infants: A randomized controlled trial comparing gluteal versus anterolateral **thigh** muscle administration.
AUTHOR(S): Alves, Andrea Santos Rafael; Nascimento, Cristiane M. R.; Granato, Celso H.; Sato, Helena Keiko; Morgato, Marina F.; Pannuti, Claudio S. [Reprint author]
CORPORATE SOURCE: Av. Dr. Eneas de Carvalho Aguiar 470, 05403-000, Sao Paulo, SP, Brazil
cpannuti@usp.br
SOURCE: Revista do Instituto de Medicina Tropical de Sao Paulo, (May-June, 2001) Vol. 43, No. 3, pp. 139-143. print.
CODEN: RMTSAE. ISSN: 0036-4665.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 15 Aug 2001
Last Updated on STN: 19 Feb 2002

AB A significantly diminished antibody response to hepatitis B vaccine has been demonstrated in adults when the buttock is used as the **injection** site. However, in Brazil, the buttock continues to be recommended as site of **injection** for intramuscular administration of vaccines in infants. In this age group, there are no controlled studies evaluating the immunogenicity of the hepatitis B vaccine when administered at this site. In the present study, 258 infants were randomized to receive the hepatitis B vaccine either in the buttock (n = 123) or in the anterolateral **thigh** muscle (n = 135). The **immunization** schedule consisted of three doses of hepatitis B vaccine (Engerix B(R), 10 mug) at 2, 4 and 9 months of age. There were no significant differences in the proportion of seroconversion (99.3% X 99.2%), or in the geometric mean titer of ELISA anti-HBs (1,862.1 X 1,229.0 mIU/mL) between the two groups. This study demonstrates that a satisfactory serological response can be obtained when the hepatitis B vaccine is administered intramuscularly into the buttock.

L6 ANSWER 15 OF 21 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1999:398314 BIOSIS
DOCUMENT NUMBER: PREV199900398314
TITLE: Information to be provided to parents of children to be vaccinated with diphtheria-tetanus-pertussis acellular vaccine.
AUTHOR(S): Tozzi, A. E. [Reprint author]; Ciofi degli Atti, M. L.; Salmaso, S.; Anemona, A.; Parroccini, S.
CORPORATE SOURCE: Laboratorio di Epidemiologia e Biostatistica, Istituto Superiore di Sanita, Reparto Malattie Infettive, V.le Regina Elena, 299, 00161, Roma, Italy
SOURCE: Igiene Moderna, (April, 1999) Vol. 111, No. 4, pp. 391-400. print.
CODEN: IGMPAX. ISSN: 0019-1655.
DOCUMENT TYPE: Article

LANGUAGE: Italian
ENTRY DATE: Entered STN: 8 Oct 1999
Last Updated on STN: 8 Oct 1999

AB The data provided by the Progetto Pertosse, a study on 15,601 children immunized with whole-cell or acellular diphtheria-tetanus-pertussis vaccines, or with a diphtheria-tetanus vaccine, allowed to gather detailed information on adverse reactions which can occur after the administration of the acellular vaccines used in Italy. Families of pertussis vaccinees should be informed in detail of expected adverse reactions. The results from Progetto Pertosse show that the reactogenicity of acellular vaccines is much lower than that observed with whole-cell vaccines, and similar to diphtheria-tetanus vaccines. The most common adverse events such as fever and local reactions start and end in most cases within 2 days of administration, and in the majority of cases have a short duration. The simultaneous administration of polio and hepatitis B vaccines does not increase the reactogenicity and does not affect the efficacy of acellular vaccines. **Injection** in the buttock is associated with a lower probability of observing common adverse reactions when compared to **injection** in the **thigh**. Children who experienced an adverse reaction are more likely to present the same event at following doses. Appropriate information to parents of vaccinees on the safety of acellular pertussis vaccines is necessary, it is useful to reassure the families of vaccinees and avoid interruptions of the **immunization** series due to false contraindications.

L6 ANSWER 16 OF 21 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1998:306446 BIOSIS
DOCUMENT NUMBER: PREV199800306446
TITLE: Pulsing of dendritic cells with cell lysates from either B16 melanoma or MCA-106 fibrosarcoma yields equally effective vaccines against B16 tumors in mice.
AUTHOR(S): Dematos, Pierre [Reprint author]; Abdel-Wahab, Zeinab; Vervaert, Carol; Hester, Dina; Seigler, Hilliard
CORPORATE SOURCE: Box 3966, Duke Univ. Med. Cent., Erwin Rd., Durham, NC 27710, USA
SOURCE: Journal of Surgical Oncology, (June, 1998) Vol. 68, No. 2, pp. 79-91. print.
CODEN: JSONAU. ISSN: 0022-4790.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 15 Jul 1998
Last Updated on STN: 15 Jul 1998

AB Background and Objectives: Dendritic cells (DC) pulsed in vitro with a variety of antigens have proved effective in producing specific antitumor effects in vivo. Experimental evidence from other laboratories has confirmed that shared antigens can be encountered in histologically distinct tumors. In our experiments, we set out to evaluate the immunotherapeutic potential of vaccines consisting of DC pulsed with MCA-106 fibrosarcoma or B16 melanoma cell lysates and to determine whether a crossreactivity exists between the two tumors. Methods: DC were prepared from the bone marrow of C57BL/6 (B6) mice by culturing progenitor cells in murine granulocyte-macrophage colony-stimulating factor (GM-CSF). They were separated into three equal groups and were either pulsed with B16 melanoma cell lysates (BDC), pulsed with tumor extract from the syngeneic fibrosarcoma MCA106 (MDC), or left unpulsed (UDC). DC were then used to immunize three groups of mice, with all mice receiving two weekly intravenous (IV) doses of 1×10^6 DC from their respective preparations on days -14 and -7. A fourth group of control mice were left untreated. On day 0, all mice were challenged with subcutaneous **injections** of 1×10^5 B16 and 1×10^5 MCA tumor cells, administered in the left and right **thighs**, respectively. After the inoculations, the mice were monitored closely with respect to tumor growth and survival. Results: The MDC mice developed specific cellular immunity directed against not only MCA-106 tumor cells, but also against B 16 melanoma, as measured through chromium-release assays of splenocyte preparations, while remaining ineffective at killing both L929 fibroblasts and CT26 tumor cells. By day 30 after tumor inoculations, control mice manifested the

largest B16 tumor volumes at a mean of 2185 mm³, followed by the UDC, MDC, and BDC groups at 92 mm³ (P = 0.00008), 3 mm³ (P = 0.000002), and 2 mm³ (p = 0.00004), respectively. The survival data mirrored this pattern, with control animals displaying the shortest mean survival time (37.1 +/- 4.0 days), followed by UDC (44.8 +/- 6.6), MDC (56.2 +/- 14.7), and BDC (56.4 +/- 18.3) animals. No significant differences were noted between MCA-106 and B16 cell lysate-pulsed DC vaccines with respect to their abilities to inhibit B16 tumor growth and to prolong survival. These findings were confirmed using a B16 pulmonary metastasis model. Likewise, vaccination with interferon-gamma gene-modified MCA-106 tumor cells was shown to be effective at protecting against a subsequent subcutaneous B 16 tumor challenge in 3 of 4 mice observed. Conclusions: These results demonstrate that **immunization** with antigen-pulsed DC confers cellular immunity, retards tumor growth, and prolongs the survival of tumor-challenged mice. The ability of MCA-106 cell lysate-pulsed DC vaccines to inhibit the growth of subcutaneous B16 tumors also suggests the presence of shared tumor-associated antigens between these two histologically distinct tumors.

L6 ANSWER 17 OF 21 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1996:85586 BIOSIS
DOCUMENT NUMBER: PREV199698657721
TITLE: A Corynebacterium pseudotuberculosis bacterin with muramyl dipeptide induces antibody titers, increases the time of onset, and decreases naturally occurring external abscesses in sheep and goats.
AUTHOR(S): Brogden, K. A. [Reprint author]; Glenn, J. A.; East, N.; Audibert, F.
CORPORATE SOURCE: Natl. Anim. Dis. Cent., ARS, USDA, Ames, IA 50010, USA
SOURCE: Small Ruminant Research, (1996) Vol. 19, No. 2, pp. 161-168.
ISSN: 0921-4488.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 27 Feb 1996
Last Updated on STN: 28 Feb 1996

AB Lambs from a university sheep flock and kids from a commercial goat dairy were injected with a bacterin containing Corynebacterium pseudotuberculosis (1 mg whole cells and 50 mu-g muramyl dipeptide in 10% light mineral oil) twice i.m. in the **thigh**, 1 month apart. All animals were then exposed to naturally infected adults under field conditions. Serum antibody titers to C. pseudotuberculosis, determined regularly up to 19 months in all animals vaccinated in 1990 and up to 7 months in all animals vaccinated in 1991, rose sharply after vaccination and remained higher (P lt 0.05) in vaccinated animals after that. Lambs and kids born in 1990 were watched for 28 months and 21 months, respectively, for development of naturally occurring external abscesses and lambs and kids born in 1991 were watched for 15 months and 8 months, respectively, until the project was ended. Vaccine efficacy was assessed by both the period of time for vaccinated animals to develop abscesses (i.e. time-to-infection) and the final number of vaccinated animals with abscesses. Abscesses occurred in 9/22 non-vaccinated lambs (time-to-infection 478 +/- 78 days) and in 4/21 (NS at P lt 0.05) vaccinated lambs (time-to-infection 665 +/- 42 days, NS at P lt 0.05). Lack of significance was due primarily to the low numbers of lambs with abscesses remaining in the trial after attrition losses. Abscesses occurred in 14/82 non-vaccinated kids (time-to-infection 483 +/- 35 days) and in 7/75 (NS at P lt 0.05) vaccinated kids (time-to-infection 595 +/- 20 days, P lt 0.05). Local **injection** site reactions (e.g. inflammation, abscess formation) or systemic reactions (e.g. lethargy) due to bacterin administration were not seen in any animal.

L6 ANSWER 18 OF 21 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1995:178193 BIOSIS
DOCUMENT NUMBER: PREV199598192493
TITLE: The Surprisingly High Acceptability of Low-Efficacy

Vaccines for Otitis Media: A Survey of Parents Using
Hypothetical Scenarios.

AUTHOR(S): Wischnack, Lori L.; Jacobson, Robert M. [Reprint author];
Poland, Gregory A.; Jacobsen, Steven J.; Harrison, Jay M.;
Murtaugh, Paul A.
CORPORATE SOURCE: Desk BA3B, Mayo Clin., 200 First Street S.W., Rochester, MN
55905, USA
SOURCE: Pediatrics, (1995) Vol. 95, No. 3, pp. 350-354.
CODEN: PEDIAU. ISSN: 0031-4005.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 26 Apr 1995
Last Updated on STN: 26 Apr 1995

AB Objective. To determine parental thresholds for accepting vaccines for
otitis media prevention given tradeoffs of efficacy, adverse effects, and
administration mode. Method. We interviewed 601 randomly selected
parents with children 0 through 6 years of age presenting to our community
pediatric clinic. For each of five hypothetical vaccines, which varied
administration mode from nasal spray to two **injections** and
adverse effects from mild to severe, parents indicated the lowest number
of otitis media episodes that the vaccine had to prevent in the next 6
months for them to accept the vaccine. Results. About half the parents
would accept any one of the vaccines if it would prevent three or more
infections in the next 6 months. When the vaccine would prevent one
episode of otitis media over the next 6 months, 33% of parents would
accept the medial vaccine (one **injection** in the **thigh**,
with some children getting a red, sore **injection** site and a few
having a fever of 102 degree F for one day). Seventeen percent
accepted a vaccine requiring two **injections** (influenza
vaccine-like) or having increased adverse effects (pneumococcal
vaccine-like) despite the vaccine only preventing one episode of otitis
media over the next 6 months. No substantial differences in these
proportions were found when compared among groups by reason-for-visit,
recent occurrence of otitis media, or a history of recurrent otitis media
in a sibling. Conclusion. Many parents will accept low efficacy vaccines
for otitis media prevention. Parental acceptance does not vary with the
child's otitis media experience but does vary with severity of adverse
effects and administration mode of the vaccine.

L6 ANSWER 19 OF 21 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
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ACCESSION NUMBER: 1993:437021 BIOSIS
DOCUMENT NUMBER: PREV199396091646
TITLE: Optimum needle length for DPT inoculation of Indian
infants.
AUTHOR(S): Chugh, Krishan [Reprint author]; Chawla, Deepak; Aggarwal,
Bharat Bhushan
CORPORATE SOURCE: J-5/169, Rajouri Garden, New Delhi 110 027, India
SOURCE: Indian Journal of Pediatrics, (1993) Vol. 60, No. 3, pp.
435-440.
CODEN: IJPEA2. ISSN: 0019-5456.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 22 Sep 1993
Last Updated on STN: 22 Sep 1993

AB Correct placement of the injected DPT vaccine into the deep muscular
layers decreases the local reactions, including the sterile abscess
formation. However, recommendations on size of the needle to be used and
the angle of **injection** are not easily available, are not uniform
and are based on case reports. The only study based on scientific data of
ultrasonographic measurement of fat layer and muscle layer thickness of
thigh of only 24 infants of 4 months age covers only American
children. (Hick et al, Pediatrics 1989; 84: 136-37). In the present
study, we have produced similar data on 215 Indian children belonging to
all those age groups in which DPT vaccinations are given. Mean thickness
of skin + fat layer in the middle one-third of the anterolateral aspect of
thigh was 1.03 +/- 0.23 cm, 1.04 +/- 0.21 cm, 0.95 +/- 0.19 cm and
1.06 +/- 0.27 cm in the age groups of 6-12 weeks (Groups I), 13-18 weeks

(Group II), 19-24 weeks (Groups III) and 18 +- 1 month (Group IV) respectively. These age groups correspond to the timings of first 3 primary doses and the first booster dose of the DPT vaccine in our **immunization** clinic. Mean thickness of all the soft tissues together at the same site were 1.87 +- 0.35, 2.17 +- 0.38, 2.07 +- 0.39 and 2.07 +- 0.26 cm respectively for the groups I to IV. Calculations with 25, 20 and 15 mm long needles injected at an angle of 45 degree and 90 degree angle (actual depth of penetration 15 mm) or a 20 mm needle injected at 45 degree angle (actual depth of penetration, 14.1 mm). Success rates in the four groups with 15 mm needle at 90 degree angle would be 88.5%, 93.2%, 90.5% and 90.5% respectively, and with 20 mm needle at 45 degree angle would be 92.3%, 93.1%, 90.5% and 90.5% respectively. Thus, 20 mm needle at 45 degree or 15 mm needle at 90 degree inserted to their full length at the mid anterolateral **thigh** of the child are recommended for field trials to confirm that they indeed reduce the incidence of subcutaneous sterile abscess formation and other local reactions.

L6 ANSWER 20 OF 21 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1984:271367 BIOSIS
DOCUMENT NUMBER: PREV198478007847; BA78:7847
TITLE: DIPHTHERIA TETANUS PERTUSSIS ASSOCIATED REACTIONS AN
ANALYSIS BY **INJECTION** SITE MANUFACTURER PRIOR
REACTIONS AND DOSE.
AUTHOR(S): BARAFF L J [Reprint author]; CODY C L; CHERRY J D
CORPORATE SOURCE: EMERGENCY MED CENT, LOS ANGELES, CALIF 90024, USA
SOURCE: Pediatrics, (1984) Vol. 73, No. 1, pp. 31-36.
CODEN: PEDIAU. ISSN: 0031-4005.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB The effects of **injection** site, manufacturer, previous reactions and dosage reduction upon subsequent reactions to DTP [diphtheria-tetanus-pertussis] **immunization** were investigated. Local reactions, notably pain and swelling, were less common when the **immunization** was given in the buttocks than in the **thigh**. No **injection** site was consistently associated with lower systemic reaction rates. There was no significant difference in the rate of more serious reactions by vaccine manufacturer. Differences in rates of less serious reactions by manufacturer were observed but seemed to be related to vaccine lot differences rather than the specific vaccines. In a subset of 772 children, in whom data regarding sequential reactions were available, all 3 reactions investigated, local redness, temperature $\geq 39^{\circ}$ C and persistent crying longer than 1/2 h, were 2-3 times more frequent on a subsequent **immunization** when present on a prior vaccination than if not present on a prior vaccination than if not present previously. Children (100) received a half dose of DTP vaccine because of a less serious reaction associated with prior **immunization**. In all instances, they had significantly less serious local reactions and notable differences in temperature, drowsiness and persistent crying.

L6 ANSWER 21 OF 21 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1979:167813 BIOSIS
DOCUMENT NUMBER: PREV197967047813; BA67:47813
TITLE: CELL MEDIATED AND HUMORAL IMMUNE RESPONSES OF CATTLE TO BRUCELLA-ABORTUS MYCOBACTERIUM-BOVIS AND TETANUS TOXOID **IMMUNIZATION** OF THE FETUS.
AUTHOR(S): ROSSI C R [Reprint author]; KIESEL G K; KRAMER T T; HUDSON R S
CORPORATE SOURCE: ANIM HEALTH RES, SCH VET MED, AUBURN UNIV, AUBURN, ALA 36830, USA
SOURCE: American Journal of Veterinary Research, (1978) Vol. 39, No. 11, pp. 1742-1747.
CODEN: AJVRAH. ISSN: 0002-9645.
DOCUMENT TYPE: Article

FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB Cell-mediated and humoral immune responses of bovine fetuses to tetanus toxoid and killed M. bovis and B. abortus were investigated. Eight pregnant cows were laparotomized, and their fetuses were injected (through the uterine wall) in the **thighs** with a mixture of the 3 antigens suspended in Freund's complete adjuvant. At the time of **immunization**, the fetuses ranged from 168-248 gestational days of age. After birth and at periods of up to 4-10 mo. thereafter, calves were tested for cell-mediated immunity (CMI) by skin testing for delayed-type hypersensitivity (DTH) and by blastogenesis as measured by the uptake of [3H]thymidine into lymphocyte cultures. Tests for humoral antibodies to tetanus toxoid and B. abortus were also done. Dams of fetuses showed no significant immune responses to test antigens, whereas some fetuses responded to all antigens. Tetanus toxoid produced CMI responses in 7 of 8 calves, M. bovis in 6 of 8 calves, and B. abortus in 3 of 8 calves. Calves which produced large DTH reactions were consistently positive in blastogenesis assays; calves which had negative, suspicious or weakly positive DTH reactions gave inconsistent results in blastogenesis assays. All calves with CMI reactions had antibody to the respective antigens. Cell-mediated immune reactions were still strong at 150-200 days after the single in utero **injection**; antibody titers to B. abortus diminished significantly at this time, whereas antibody titers to tetanus toxoid diminished slightly, if at all. Five calves were given a 2nd **injection** after birth, and those calves which had not responded to the in utero **immunization** of certain antigens responded after the 2nd **immunization**. After the 2nd **immunization**, CMI responses to B. abortus increased, but antibody titers diminished; CMI and antibody responses to tetanus toxoid increased.

=> ~~immunization~~

38582 IMMUNIZATION

1703 IMMUNIZATIONS

L1 39212 IMMUNIZATION

(IMMUNIZATION OR IMMUNIZATIONS)

=> thigh (s) injection

3157 THIGH

454 THIGHS

3482 THIGH

(THIGH OR THIGHS)

455772 INJECTION

103846 INJECTIONS

519368 INJECTION

(INJECTION OR INJECTIONS)

L2 228 THIGH (S) INJECTION

=> L1 and L2

L3 3 L1 AND L2

=> D L3 IBIB ABS 1-3

L3 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:621675 CAPLUS

DOCUMENT NUMBER: 138:3610

TITLE: Investigation on the effect of peptides mixture from tumor cells inducing anti-tumor specific immune response

AUTHOR(S): Feng, Zuohua; Huang, Bo; Zhang, Guimei; Li, Dong; Wang, Hongtao

CORPORATE SOURCE: Department of Medical Molecular Biology, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, 430030, Peop. Rep. China

SOURCE: Science in China, Series C: Life Sciences (2002), 45(4), 361-369

CODEN: SCCLFO; ISSN: 1006-9305

PUBLISHER: Science in China Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The peptides mixture was prepared from tumor cells by freezing-thawing cells, precipitation by heating, followed by acidification of the solution. The activation and proliferation of mouse splenocytes by HSP70-peptide complex, formed by the binding of HSP70 and peptides in vitro, were observed, so was the specific cytotoxicity of the proliferative lymphocytes to tumor cells. The phenotypes of the proliferative lymphocytes were analyzed by a flow cytometry. BALB/c mice inoculated with H22 hepatocarcinoma cells in peritoneal cavity or hind **thigh** were immunized by **injection** with HSP70-peptides complex to observe the inhibitory effect of the **immunization** on tumor and lifetime of tumor-bearing mice. On the other hand, blood samples were collected from the immunized mice to check the functions of liver and kidney. The results showed that the peptides mixture from tumor cells contained tumor-specific antigen peptides which could be presented by HSP70 to activate lymphocytes in vitro, the proliferative lymphocytes were T cells which were specifically cytotoxic to tumor cells, the in vivo growth of both ascitic and solid, carcinoma could be suppressed by **immunization** with HSP70-peptides and the lifetime of tumor-bearing mice was prolonged, the in vivo **immunization** with HSP70-H22-peptides had no impact on the function of mouse liver and kidney, suggesting that there was no occurrence of autoimmunity in vivo after **immunization**.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> "rectus femoris"
      2090 "RECTUS"
        1 "RECTUSES"
        48 "RECTI"
        2 "RECTIS"
      2136 "RECTUS"
            ("RECTUS" OR "RECTUSES" OR "RECTI" OR "RECTIS")
      1234 "FEMORIS"
        4 "FEMORISES"
      1238 "FEMORIS"
            ("FEMORIS" OR "FEMORISES")
L8      222 "RECTUS FEMORIS"
            ("RECTUS" (W) "FEMORIS")
```

```
=> L8 and l2
L9      1 L8 AND L2
```

```
=> D L9 IBIB ABS
```

```
L9  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:      1997:738472  CAPLUS
DOCUMENT NUMBER:       128:31933
TITLE:                 In vivo localization of diglycylcysteine-bearing
                        synthetic peptides by nuclear imaging of oxotechnetate
                        transchelation
AUTHOR(S):             Bogdanov, A., Jr.; Petherick, P.; Marecos, E.;
                        Weissleder, R.
CORPORATE SOURCE:      CENTER FOR MOLECULAR IMAGING RESEARCH, MASSACHUSETTS
                        GENERAL HOSPITAL, BOSTON, MA, 02129, USA
SOURCE:                Nuclear Medicine and Biology (1997), 24(8), 739-742
                        CODEN: NMBIEO; ISSN: 0969-8051
PUBLISHER:             Elsevier
DOCUMENT TYPE:          Journal
LANGUAGE:               English
AB  A phenomenon of in vivo transchelation of oxotechnetate from a complex
      with glucoheptonic acid to synthetic peptides bearing oxotechnetate-
      binding motifs and a technique for in vivo visualization of these peptides
      are described. Using two model peptides bearing two tandem
      diglycylcysteine (GGC) motifs or three GGC motifs, we demonstrated that:
      (i) these peptides efficiently transchelated oxo-[99mTc]technetate from a
      complex with glucoheptonic acid in vitro (a complex with peptides was
      stable at least 24 h; radiochem. purity exceeded 95% by high performance
      liquid chromatog.); (ii) injection of peptides into the
      rectus femoris muscle (at 0.5-1  $\mu$ mol of SH groups)
      followed by an i.v. injection of 99mTc-glucoheptonate (0.25-0.5
      mCi per animal) yielded visualization of the injected muscle by nuclear
      imaging within 1 h after injection; (iii) the exptl./control
      (contralateral) thigh muscle ratio was  $1.80 \pm 0.05$  for
      peptide P1 and  $3.0 \pm 0.1$  for P2; (i.v.) the injection of a
      control peptide with SH groups covalently modified with N-ethylmaleimide
      resulted in a ratio of  $1.4 \pm 0.2$ . These findings argue for specific
      association of oxo-[99mTc]technetate with free thiols within the binding motif
      of injected peptides in vivo. In vivo transchelation of
      oxo-[99mTc]technetate may be useful for the purpose of noninvasive imaging
      of gene expression, i.e., when the expression product bears GGC motifs.
REFERENCE COUNT:       28  THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS
                        RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
```

```
=> gracilis and l2
      6050 GRACILIS
L10      0 GRACILIS AND L2
```

```
=> leg
      19180 LEG
      6474 LEGS
L11      23945 LEG
```

(LEG OR LEGS)

=> L1 and l11

L12 31 L1 AND L11

=> human

1426742 HUMAN

326335 HUMANS

L13 1589941 HUMAN

(HUMAN OR HUMANS)

=> L12 and l13

L14 6 L12 AND L13

=> D IBIB ABS 1-6

```

=> L21 and papillomavirus
      8384 PAPILLOMAVIRUS
      1344 PAPILLOMAVIRUSES
      8483 PAPILLOMAVIRUS
          (PAPILLOMAVIRUS OR PAPILLOMAVIRUSES)
L29      0 L21 AND PAPILLOMAVIRUS

=> gonoccal and L21
      3 GONOCAL
L30      0 GONOCAL AND L21

=> "gonoccal infection"
      3 "GONOCAL"
      228819 "INFECTION"
      67502 "INFECTIONS"
      262242 "INFECTION"
          ("INFECTION" OR "INFECTIONS")
L31      0 "GONOCAL INFECTION"
          ("GONOCAL" (W) "INFECTION")

=> "treponema pallidum"
      2316 "TREPONEMA"
      29 "TREPONEMAS"
      18 "TREPONEMATA"
      2329 "TREPONEMA"
          ("TREPONEMA" OR "TREPONEMAS" OR "TREPONEMATA")
      2365 "PALLIDUM"
L32      1343 "TREPONEMA PALLIDUM"
          ("TREPONEMA" (W) "PALLIDUM")

=> L32 and L21
L33      0 L32 AND L21

=> L32 and L2
L34      0 L32 AND L2

=> "genital mycoplasmas"
      7337 "GENITAL"
      255 "GENITALS"
      7515 "GENITAL"
          ("GENITAL" OR "GENITALS")
      1317 "MYCOPLASMAS"
L35      24 "GENITAL MYCOPLASMAS"
          ("GENITAL" (W) "MYCOPLASMAS")

=> L24 and L21
L36      3 L24 AND L21

=> D IBIB ABS 1-3

```